NEXTSTEPS IN DERM | GW School of Medicine & Health Sciences

# Abrocitinib Therapeutic Cheat Sheet

**COMPILED BY:** ROBIN PICAVIA, MD • **REVIEWED BY:** ADAM J. FRIEDMAN, MD, FAAD

## TRADE NAMES

- Cibinqo

## MECHANISM OF ACTION[1,2,3,4]

- Abrocitinib is a small-molecule inhibitor that selectively targets JAK1. Cytokines involved in atopic dermatitis, including IL-4, IL-13, IL-31, IL-22, and thymic stromal lymphopoietin, signal through JAK1 dependent pathways which contribute to inflammation and pruritus. Inhibition of JAK1 therefore targets multiple inflammatory pathways involved in atopic dermatitis. Abrocitinib preferentially inhibits JAK1 over JAK2, with less effect on JAK2 dependent hematopoiesis. Improvement in itch can occur within days of starting treatment, with skin improvement occurring over time.

## FDA-APPROVED INDICATIONS[1]

- Abrocitinib is FDA approved for the treatment of adults and pediatric patients 12 years and older for moderate-to-severe atopic dermatitis.

## OFF-LABEL DERMATOLOGIC USES[5,6,7,8]

- Prurigo nodularis and chronic pruritus of unknown origin based on a phase 2 open label trials.
- Bullous pemphigoid based on retrospective comparative data.
- Dystrophic epidermolysis bullosa, based on a two-patient case series.
- Other JAK-responsive inflammatory dermatoses (e.g., alopecia areata, vitiligo, dermatomyositis, lichen sclerosus) reported for the JAK inhibitor class, largely based on small studies and clinical experience rather than controlled trials.

## DOSING[1]

- Recommended starting dose is 100 mg orally once daily; increase to 200 mg once daily if response is inadequate.
- Moderate renal impairment (eGFR 30 to <60 mL/min/1.73 m2) or CYP2C19 poor metabolizers: start at 50 mg once daily; the maximum dose is 100 mg once daily.

## WARNINGS & PRECAUTIONS[1]

- Serious infections leading to hospitalization or death, including tuberculosis (test and treat latent TB before use), bacterial, invasive fungal (e.g., cryptococcosis, pneumocystosis), viral (including herpes zoster), and other opportunistic infections. Avoid initiation during an active serious infection.
- Mortality: higher all-cause mortality observed with another JAK inhibitor versus TNF blockers in a rheumatoid arthritis safety trial.
- Malignancy and lymphoproliferative disorders (including lymphoma and lung cancer, particularly in current/past smokers).
- Major adverse cardiovascular events (MACE), including cardiovascular death, myocardial infarction, and stroke.
- Thrombosis, including deep vein thrombosis, pulmonary embolism, and arterial thrombosis; avoid in patients at increased thrombotic risk.
- Additional precautions include hypoglycemia in patients with diabetes, hematologic abnormalities (thrombocytopenia, lymphopenia), lipid elevations, avoidance of live vaccines.

## SIDE EFFECTS[1,2]

- Most common adverse reactions (≥1%) include nasopharyngitis, nausea, headache, herpes simplex, increased blood creatine phosphokinase, dizziness, urinary tract infection, fatigue, acne, and vomiting; nausea and acne are more frequent at the 200 mg dose.
- Nausea is the most characteristic dose-related adverse event and headache is also increased.
- Herpes simplex and herpes zoster occur more frequently than with placebo.

## DRUG INTERACTIONS[1]

- Abrocitinib is metabolized primarily by CYP2C19 and CYP2C9. Strong CYP2C19/CYP2C9 inhibitors can increase drug levels. Strong inducers may decrease the drug's efficacy.
- Concomitant use with other JAK inhibitors, biologics, or potent immunosuppressants is not recommended.
- Complete recommended vaccinations before starting abrocitinib and avoid live vaccinations while taking the medication.

## CONSIDERATIONS[1]

- Concomitant use with antiplatelet therapies, except low-dose aspirin (≤81 mg/day), during the first 3 months of treatment.
- Severe renal impairment/end-stage renal disease and severe hepatic impairment.

## PREGNANCY AND LACTATION[1]

- Human data are insufficient to establish drug-associated risk; animal studies showed dystocia and skeletal variations at multiples of the maximum recommended human dose.
- Breastfeeding is not recommended as its been shown that abrocitinib is excreted in the milk of lactating rats.

## MONITORING[1]

- Obtain CBC with differential at baseline, 4 weeks after initiation, and 4 weeks after any dose increase. Check a lipid panel approximately 4 weeks after initiation. Screen for TB and viral hepatitis prior to treatment.

## REFERENCES

1. Cibinqo (abrocitinib) [prescribing information]. New York, NY: Pfizer Inc.; U.S. Food and Drug Administration.
2. Bieber T, Simpson EL, Silverberg JI, et al. Abrocitinib versus placebo or dupilumab for atopic dermatitis. N Engl J Med. 2021;384(12):1101-1112.
3. Simpson EL, Sinclair R, Forman S, et al. Efficacy and safety of abrocitinib in adults and adolescents with moderate-to-severe atopic dermatitis (JADE MONO-1): a multicentre, double-blind, randomised, placebo-controlled, phase 3 trial. Lancet. 2020;396(10246):255-266.
4. Reich K, Silverberg JI, Papp KA, et al. Abrocitinib efficacy and safety in patients with moderate-to-severe atopic dermatitis: results from phase 3 studies, including the long-term extension JADE EXTEND study. J Eur Acad Dermatol Venereol. 2023;37(11):2249-2262.
5. Kwatra SG, Bordeaux ZA, Parthasarathy V, et al. Efficacy and safety of abrocitinib in prurigo nodularis and chronic pruritus of unknown origin: a nonrandomized controlled trial. JAMA Dermatol. 2024;160(6):600-608.
6. Chen Y, Zhuang Z, Mao J, et al. Effectiveness and safety of methylprednisolone combined with abrocitinib compared to methylprednisolone combined with azathioprine in bullous pemphigoid: a retrospective study. Sci Rep. 2025.
7. Wang F, Zhang R, Fang Y, et al. Successful treatment of dystrophic epidermolysis bullosa with the JAK1 inhibitor abrocitinib. J Drugs Dermatol. 2026.
8. Klein B, Treudler R, Simon JC. JAK-inhibitors in dermatology - small molecules, big impact? Overview of the mechanism of action, previous study results and potential adverse effects. J Dtsch Dermatol Ges. 2022;20(1):19-24.
9. Chu DK, Schneider L, Asiniwasis RN, et al. Atopic dermatitis (eczema) guidelines: 2023 American Academy of Allergy, Asthma and Immunology/American College of Allergy, Asthma and Immunology Joint Task Force on Practice Parameters GRADE- and Institute of Medicine-based recommendations. Ann Allergy Asthma Immunol. 2024;132(3):274-312.